



Cyble 5

Multi-connectivity RF Module for fast drive-by (AMR) and IoT (LoRaWAN/Sigfox) data collection.

The Cyble 5 is a unique solution helping utilities engage in the ongoing digitalization of their water and gas distribution networks. Designed to transform mechanical meters into communication data points, Cyble 5 enables fast drive-by (AMR) and IoT data collection allowing for better billing efficiency. Conceived for agility with its embedded multi-connectivity options, Cyble 5 adapts to complex deployments and evolves with the needs from the field, making it a safe and long-term investment.

FEATURES AND BENEFITS

Designed for the field.

Easy to connect through a clip-on design with no wiring or wall mounting required, Cyble 5 is compact with an integrated antenna allowing for use in a wide range of existing meter box installations.

Robust under severe conditions.

Conceived to resist water, contaminants, corrosion, rough handling, and temperature cycling for a preserved reliability over time. Adaptable to water and gas environment, Cyble 5 is also IP68 and ATEX rated.

Fine-tuned by decades of industry expertise.

Cyble's patented technology ensures a perfect correlation between the mechanical meter register and the digital index for sustained accuracy. Compatible with Itron's Cyble-ready range of mechanical water meters & c-Series gas meters.



Agility with AMR/IoT data collection capabilities



Interoperable with open standards (SigFox/LoRaWan/wM-Bus)

INTEROPERABLE WITH OPEN-STANDARDS.

With out-of-the-box connectivity options, Cyble 5 modules operate with open standard protocols in mobile data collection systems using wM-Bus or multi-purpose IoT networks (LoRaWAN /Sigfox technologies).



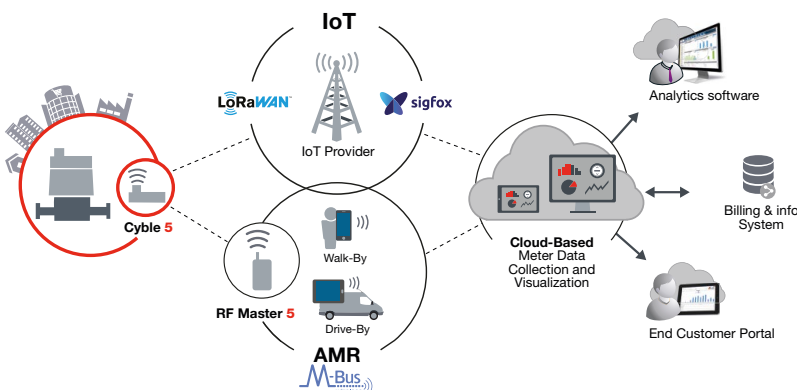
Automated Meter Reading (AMR)

Wirelessly collect data from meters either in walk-by or drive-by mode using Itron's RF Master 5. Eliminates the need for physical access to the meter.



IoT Networks (Sigfox® or LoRaWAN™)

Connect smart water meters to networks dedicated to the Internet of Things (IoT) using Sigfox® or LoRaWAN™ technologies.



EXTENDED DATA SET FOR WATER AND GAS UTILITIES

Supporting digital transformation, Cyble 5 helps utilities engage in their key operational challenges by transforming data collection through AMR and/or IoT. Delivering timely, relevant, and extensive sets of data in gas and water, Cyble 5 allows for a better understanding of resource use and improved customer relationships.



Billing Index & Consumption Data Logging

Daily billing and custom billing functions along with precise consumption data logging up to 15min resolution



Flow Distribution

Precise monitoring of the distribution flow



Backflow / Reverse Flow

Detection and quantification of backflow to help assess water quality and/or sanitary risk

Alerts and On-Event Alarms

Alarms are generated when important events are detected, such as:



- » Leakage at customer side (continuous flow)
- » Tamper attempt (dismantling)
- » Blocked meter (zero consumption)
- » Oversize/undersize

Diagnostics

Good system performance is ensured via monitoring of:



- » Battery level
- » Configuration settings
- » Clock synchronization in LoRaWAN and wM-Bus

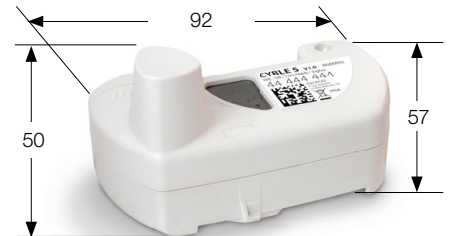
Technical Specifications

Radio Frequency Features	
Protocol	wM-Bus T2, C2 / LoRaWAN™ / Sigfox®
Modulation	FSK, BPSK (Sigfox®), CSS (LoRa®)
Frequency carrier	868 MHz ISM Band
Radiated power	≤ 25 mW
Battery lifetime	Up to 15 years*
Functional Specifications	
Power source	Lithium batteries
Protection	IP 68
Relative humidity	0 to 100% - submersible
Operating temperature**	-10°C / +55C***
Accidental temperature	-20°C / +70°C

* in standard conditions of use and temperature, theoretical lifetime without guarantee, depends on connectivity mode and reporting interval.

** Under normal applications with the specified reference operating conditions.

*** Operation: +5°C to +35°C / Storage: +5°C to +35°C / Transport: Min -20°C (<24 hours continuous), Max. +70°C (<24 hours continuous), / Min. operational temperature: -10°C (< 15 days/years) / Max operational temperature: +55°C (<15 days/years).



Dimensions (mm)

Compliance

- » IP68 certified according to EN 60529
- » Compliant with 2002/95/EC on non usage of hazardous substances in electrical and electronic equipment
- » RoHs, WEEE2, **CE**, ATEX
- » Compliant with Directive 2014/53/EU on RF Spectrum usage

Connectivity Certifications

- » LoRaWAN R1.0.2
- » Sigfox V2.6.0



Aquadis+ equipped with the Cyble 5 module



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To learn more visit **itron.com**

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